189 External Male Genitalia

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Definition

Inspection and palpation of the external genitalia includes the penis, urethral meatus, scrotum, and scrotal contents.

Technique

Inspection and palpation of the external genitalia are initially performed with the patient standing disrobed in front of the seated examiner. Repeat examination should be carried out with the patient supine. A visual scanning of the hair distribution and general appearance of the penis and scrotum is made. Large scrotal masses, undescended testes, and the inguinal bulges of hernia are frequently apparent on inspection.

The entire penis should be examined. If the patient is uncircumcised, the prepuce should be retracted so that the entire glans can be inspected. Palpation of the penile shaft, including both corpora cavernosa and the corpus spongiosum, should be carried out. The urethral meatus should be visualized and everted by the examiner's thumbs, to expose the mucosa. The entire pendulous urethra can be palpated without difficulty, and the bulbous urethra can be palpated through the scrotum and into the perineum.

Palpation of the scrotum and its contents will reveal the presence, size, position, and shape of the testicles and their adnexa. The normal testicle is ovoid, smooth, firm, and mildly tender to palpation. The testicle is easily separated from the epididymis, which lies posterior and slightly lateral to the testicle. The epididymis varies in its adherence to the posterolateral surface of the testicle. Masses in the scrotum should be transilluminated in a dark room with a small, strong light source. An undescended testicle may be located in the inguinal or abdominal region, and palpation of these areas is imperative if the testes are absent. The course of the spermatic cord can be followed easily to the internal inguinal ring by palpation. The vas deferens is felt in the scrotum by first encircling the cord with the fingers and thumb and allowing small amounts of cord tissue to pass between the thumb and second or third fingers until the thick, cordlike vas is felt.

Basic Science and Clinical Significance

Only experience and practice provide expertise in examining the genitalia, especially the scrotal contents of normal subjects. Even the experienced examiner, however, will use exploratory surgery for definitive diagnosis in many cases. As noted in Chapter 186 many abnormalities will be apparent on inspection (e.g., large scrotal masses, hypospadias, and epispadias). However, early penile carcinomas or condylomas may reside unnoticed in the coronal sulcus unless the foreskin is retracted. The inability to retract the foreskin, as in phimosis, may cause both hygienic problems and voiding symptoms. Examination of the urethral meatus may reveal stenosis or other lesions such as condylomas. In Peyronie's disease palpation of the corpora reveals the characteristic dense, fibrous plaque. Often the thickened periurethral fibrosis of urethral stricture disease can be felt in either the penile shaft or the perineum.

Scrotal masses are the most difficult lesions to differentiate by inspection and palpation. Varicoceles usually occur on the left in postpubertal men and have a "bag of worms" feel. They should disappear or become less apparent with the patient in the recumbent position. Hydroceles of the spermatic cord or testicles are cystic and readily transilluminate light. In the presence of a hydrocele, the testicle is frequently poorly felt except posteriorly. The testes may be small following mumps orchitis or in hypogonadal states. Masses located within the testes are usually tumors and require surgical evaluation. Epididymitis is the most common inflammatory disease in the scrotum and is occasionally difficult to distinguish from testicular tumors or testicular torsion. Epididymitis is favored over testicular torsion in the presence of concomitant urinary infection, prostatitis, funiculitis (inflammation of the spermatic cord), or a toxic clinical state. Acute surgical exploration is recommended when the diagnosis of testicular torsion versus epididymitis is in question. If the differentiation between testicular tumor and epididymitis is difficult, a brief trial period of appropriate antibiotic therapy (urine culture and sensitivity when possible) may be instituted. With resolution of the scrotal mass and symptoms, epididymitis is the likely source. Without resolution, surgical exploration is mandatory.

Lesions of the spermatic cord are usually inflammatory or cystic. Spermatoceles are small structures that occur in the head of the epididymis. The diagnosis can be confirmed when transillumination is demonstrated and aspiration yields viable spermatozoa.

References

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